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        JUN 01 CAS REGISTRY Source of Registration (SR) searching
                enhanced on STN
NEWS 4 JUN 26
                NUTRACEUT and PHARMAML no longer updated
NEWS 5
        JUN 29
                IMSCOPROFILE now reloaded monthly
NEWS 6 JUN 29
                EPFULL adds Simultaneous Left and Right Truncation
                 (SLART) to AB, MCLM, and TI fields
NEWS 7 JUL 09 PATDPAFULL adds Simultaneous Left and Right
                Truncation (SLART) to AB, CLM, MCLM, and TI fields
NEWS 8 JUL 14 USGENE enhances coverage of patent sequence location
                (PSL) data
NEWS 9 JUL 27 CA/CAplus enhanced with new citing references
NEWS 10 JUL 16 GBFULL adds patent backfile data to 1855
NEWS 11 JUL 21 USGENE adds bibliographic and sequence information
NEWS 12 JUL 28 EPFULL adds first-page images and applicant-cited
                references
NEWS 13 JUL 28 INPADOCDB and INPAFAMDB add Russian legal status data
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NEWS EXPRESS MAY 26 09 CURRENT WINDOWS VERSION IS V8.4,
AND CURRENT DISCOVER FILE IS DATED 06 APRIL 2009.

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FILE 'REGISTRY' ENTERED AT 15:27:43 ON 07 AUG 2009 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2009 American Chemical Society (ACS)

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STRUCTURE FILE UPDATES: 6 AUG 2009 HIGHEST RN 1173240-01-1 DICTIONARY FILE UPDATES: 6 AUG 2009 HIGHEST RN 1173240-01-1

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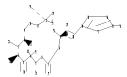
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REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

Uploading C:\Program Files\Stnexp\Queries\10591921.str



```
chain nodes :
17 18 19 20 21 22 23 25 26 27 28 38 39
ring nodes :
1 \quad 2 \quad 3 \quad 4 \quad 5 \quad 6 \quad 7 \quad 8 \quad 9 \quad 10 \quad 11 \quad 12 \quad 13 \quad 14 \quad 15 \quad 16 \quad 29 \quad 33 \quad 34 \quad 35 \quad 36 \quad 37
chain bonds :
1-17 \quad 3-25 \quad 4-18 \quad 4-19 \quad 5-20 \quad 6-22 \quad 7-21 \quad 8-23 \quad 12-39 \quad 15-26 \quad 26-27 \quad 26-28 \quad 28-34
37-38
ring bonds :
1-2 \quad 1-16 \quad 2-3 \quad 3-4 \quad 4-5 \quad 5-6 \quad 6-7 \quad 7-8 \quad 8-9 \quad 9-10 \quad 10-11 \quad 11-12 \quad 12-13 \quad 12-29
13-14 13-29 14-15 15-16 33-34 33-37 34-35 35-36 36-37
exact/norm bonds:
1-2 \quad 1-16 \quad 1-17 \quad 2-3 \quad 3-4 \quad 3-25 \quad 4-5 \quad 4-18 \quad 4-19 \quad 5-6 \quad 5-20 \quad 6-7 \quad 6-22 \quad 7-8 \quad 7-21
8-9 \quad 8-23 \quad 9-10 \quad 10-11 \quad 11-12 \quad 12-13 \quad 12-29 \quad 12-39 \quad 13-14 \quad 13-29 \quad 14-15 \quad 15-16
15-26 26-27 26-28 28-34 33-34 33-37 34-35 35-36 36-37 37-38
isolated ring systems :
containing 1 : 33 :
```

G1:H,OH

G2:C,O

G3:H, Ak, CH3, Et, n-Pr

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:CLASS 18:CLASS 19:CLASS 20:CLASS 21:CLASS 22:CLASS 23:CLASS 25:CLASS 26:CLASS 27:CLASS 28:CLASS 29:Atom 33:Atom 34:Atom 35:Atom 36:Atom 37:Atom 38:CLASS 39:CLASS

10591921.trn 01/04/2010 Page 3

Stereo Bonds:

22-6 (Single Hash). 23-8 (Single Hash). 26-15 (Single Wedge).

Stereo Chiral Centers:

6 (Parity=Even) 8 (Parity=Odd) 15 (Parity=Odd)

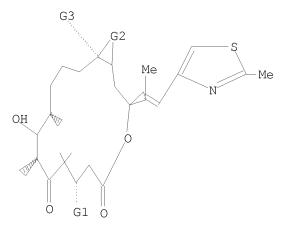
Stereo RSS Sets:

Type=Relative (Default). 3 Nodes= 6 8 15

L1 STRUCTURE UPLOADED

=> d 11

L1 HAS NO ANSWERS



G1 H,OH

G2 C,O

G3 H, Ak, Me, Et, n-Pr

Structure attributes must be viewed using STN Express query preparation.

=> s 11

SAMPLE SEARCH INITIATED 15:28:10 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 43 TO ITERATE

100.0% PROCESSED 43 ITERATIONS 12 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**

10591921.trn 01/04/2010 Page 4

PROJECTED ITERATIONS: 467 TO 1253 PROJECTED ANSWERS: 33 TO 447

L2 12 SEA SSS SAM L1

=> s l1 sss full

FULL SEARCH INITIATED 15:28:18 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 749 TO ITERATE

100.0% PROCESSED 749 ITERATIONS 178 ANSWERS

SEARCH TIME: 00.00.01

L3 178 SEA SSS FUL L1

=> FIL HCAPLUS

COST IN U.S. DOLLARS
SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST 185.88 186.10

FILE 'HCAPLUS' ENTERED AT 15:28:24 ON 07 AUG 2009 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2009 AMERICAN CHEMICAL SOCIETY (ACS)

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FILE COVERS 1907 - 7 Aug 2009 VOL 151 ISS 7
FILE LAST UPDATED: 6 Aug 2009 (20090806/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Jun 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Jun 2009

HCAplus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2009.

CAS Information Use Policies apply and are available at:

http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate substance identification.

The ALL, BIB, MAX, and STD display formats in the CA/CAplus family of databases have been updated to include new citing references information. This enhancement may impact record import into database management software. For additional information, refer to NEWS 22.

=> s 13

L4 789 L3

 \Rightarrow s 14 and p/dt

6789111 P/DT

L5 383 L4 AND P/DT

=> s 15 and us/pc

1963723 US/PC

L6 229 L5 AND US/PC

 \Rightarrow s 16 and py<=2004

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L7 154 L6 AND PY<=2004

=> s 17 and epothilone

1213 EPOTHILONE

975 EPOTHILONES 1558 EPOTHILONE

(EPOTHILONE OR EPOTHILONES)

L8 151 L7 AND EPOTHILONE

=> d 18 ibib abs hitstr 1-10

L8 ANSWER 1 OF 151 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:203160 HCAPLUS

DOCUMENT NUMBER: 146:267903

TITLE: PSMA-binding aptamers and conjugates of PSMA-binding

aptamers for disease treatment

INVENTOR(S): Diener, John L.; Hatala, Paul; Wagner-Whyte, Jess;

Wilson, Charles

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 113pp., Cont.-in-part of U.S.

Ser. No. 826,077.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 12

PATENT INFORMATION:

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US 20040022727	A1	20040205	US 2003-600007		20030618 <
US 20040249130	A1	20041209	US 2004-826077		20040415 <
PRIORITY APPLN. INFO.:			US 2002-390042P	P	20020618
			US 2003-600007	A2	20030618
			US 2004-826077	A2	20040415
			US 2005-660514P	P	20050307
			US 2005-670518P	Р	20050411

AB The present invention provides stabilized, high affinity nucleic acid ligands to PSMA as well as conjugates of these aptamers with various moieties, esp, drugs or cytotoxic compds. or protein toxins. Thus, the identification and preparation of novel, stable, high affinity ligands to PSMA using the SELEX method with 2'-O-Me substituted nucleic acids, and cell surface SELEX are described. Two aptamer-vinblastine conjugates were tested in an in vitro cell proliferation assay. These conjugates killed LNCaP cells at 10-500 nM.

IT 152044-54-7D, Epothilone B, aptamer conjugates

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(PSMA-binding aptamers and conjugates of PSMA-binding aptamers for disease treatment)

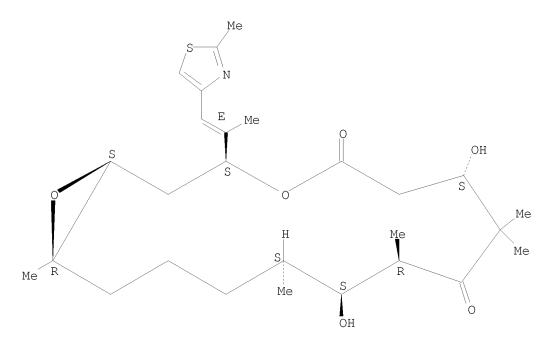
RN 152044-54-7 HCAPLUS

CN 4,17-Dioxabicyclo[14.1.0]heptadecane-5,9-dione,

 $7, 11- {\tt dihydroxy-8,8,10,12,16-pentamethyl-3-[(1E)-1-methyl-2-(2-methyl-4-1)]} \\$

thiazolyl)ethenyl]-, (1S,3S,7S,10R,11S,12S,16R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-). Double bond geometry as shown.



OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L8 ANSWER 2 OF 151 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2005:1005828 HCAPLUS

DOCUMENT NUMBER: 143:292590

TITLE: Method of producing cationic liposomes comprising a

lipophilic compound

INVENTOR(S): Mundus, Carsten; Welz, Christain; Schramel, Oliver;

Haas, Heinrich; Fichert, Thomas; Schulze, Brita; Peymann, Toralf; Michaelis, Uwe; Teifel, Michael;

Gruber, Friedrich; Winter, Gerhard

PATENT ASSIGNEE(S): Medigene Oncology G.m.b.H., Germany

SOURCE: U.S. Pat. Appl. Publ., 30 pp., Cont.-in-part of Appl.

No. PCT/EP03/06759.

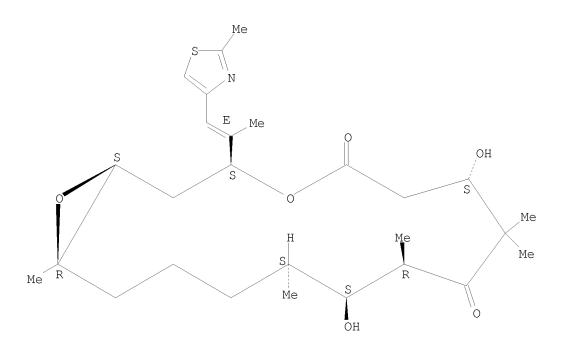
CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 6

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PATENT NO.
                  KIND DATE APPLICATION NO.
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    WO 2004002468
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                                          US 2002-391245P P 20020626
PRIORITY APPLN. INFO.:
                                                            P 20020626
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                                                          A 20020821
                                          EP 2002-18724
                                          EP 2003-4744
                                                             A 20030304
                                          WO 2003-EP6759
                                                             A2 20030626
    A method for producing a cationic liposome comprising a lipophilic active
AB
    compound with phys. and chemical stability during manufacturing, storing and
    reconstituting, and further a cationic liposome obtainable by this method
    as well as pharmaceutical compns. are disclosed. Thus, liposomes
    contained paclitaxel 3, DOTAP-Cl 50, DOPC 47, trehalose-dihydrate 108.2,
    and EtOH 1.33 mol%.
ΙT
    152044-54-7, Epothilone B
    RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
       (method of producing cationic liposomes comprising a lipophilic compound)
    152044-54-7 HCAPLUS
RN
    4,17-Dioxabicyclo[14.1.0]heptadecane-5,9-dione,
CN
    7,11-dihydroxy-8,8,10,12,16-pentamethyl-3-[(1E)-1-methyl-2-(2-methyl-4-1)]
    thiazolyl)ethenyl]-, (1S,3S,7S,10R,11S,12S,16R)- (CA INDEX NAME)
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Absolute stereochemistry. Rotation (-). Double bond geometry as shown.



L8 ANSWER 3 OF 151 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2005:641841 HCAPLUS

DOCUMENT NUMBER: 143:159436

TITLE: Aptamers binding to platelet-derived growth factor and

their use in treatment of neoplasms dependent on the

growth factor

INVENTOR(S): Grate, Dilara; Diener, John L.; Wilson, Charles;

McCauley, Thomas Greene

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 104 pp., Cont.-in-part of U.S.

Ser. No. 873,853.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 12

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US 20040249130	A1	200	41209	Ţ	JS 2	004-	8260	77		2	0040	415	<
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US 20050124565	A1	200	50609	Ţ	JS 2	004-	8738	53		2	0040	621	<
WO 2005052121	A2	200	50609	Ī	WO 2	004-	US39	137		2	0041	122	
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US 2005-667866P P 20050401 US 2005-672200P P 20050415 WO 2005-US39975 W 20051102

Therapeutically useful aptamer ligands for platelet-derived growth factor (PDGF) and its isoforms, PDGF receptors, vascular endothelial growth factor (VEGF), and VEGF receptor are described for use in cancer therapy. The aptamers may bind one or more of these proteins. These aptamers are particularly useful in solid tumor therapy and can be used alone or in combination with known cytotoxic agents for the treatment of solid tumors. Also disclosed are aptamers having one or more CpG motifs for use as adjuvants. These aptamers were selected by SELEX. These oligonucleotides inhibited the proliferation of 3T3 cells in culture at concns. of 3 nM to >1 μM . They also inhibited PDGF-dependent chemotaxis of 3T3 cells. In a Lewis lung carcinoma model, aptamers were effective in inhibiting proliferation of implants in mice. The composition, when combined with irinotecan, improved the efficacy of the irinotecan in colon cancer xenograft models.

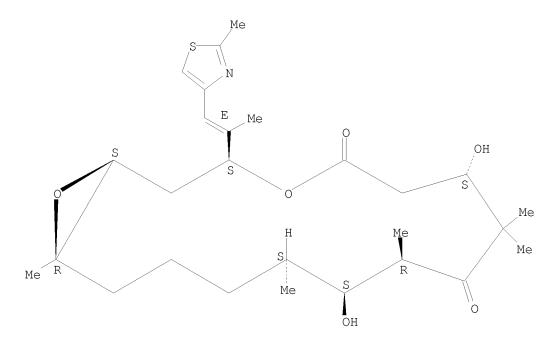
IT 152044-54-7, Epothilone B

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (cancer chemotherapy with aptamers and; aptamers binding to platelet-derived growth factor and their use in treatment of neoplasms dependent on PDGF)

RN 152044-54-7 HCAPLUS

CN 4,17-Dioxabicyclo[14.1.0]heptadecane-5,9-dione, 7,11-dihydroxy-8,8,10,12,16-pentamethyl-3-[(1E)-1-methyl-2-(2-methyl-4-thiazolyl)ethenyl]-, (1S,3S,7S,10R,11S,12S,16R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-). Double bond geometry as shown.



L8 ANSWER 4 OF 151 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2005:572598 HCAPLUS

DOCUMENT NUMBER: 143:97209

TITLE: Synthesis of epothilones for use in

pharmaceutical compositions as antitumor agents
INVENTOR(S):
Danishefsky, Samuel J.; Rivkin, Alexey; Yoshimura,
Fumihiko; Chou, Ting-Chao; Gabarda, Ana E.; Dong,

Huajin; Wu, Kaida; Moore, Malcolm A. S.; Dorn, David

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 274 pp., Cont.-in-part of U.S.

Ser. No. 435,408.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

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OTHER SOURCE(S): CASREACT 143:97209; MARPAT 143:97209 GΙ

Epothilone analogs, such as I [-A-B-, -C-D- = -C.tplbond.C-,AΒ -CH(R)CH(R1)-, -C(R):C(R1)-; R, R1 = H, alkyl, halogen, alkoxy, acyl, etc.; -A-B- = fused oxirane ring; -C-D- = fused cyclopropane or fused aziridine ring; R2 = aryl, heteroaryl, arylalkyl, heteroarylalkyl] are prepared as antitumor agents. The present invention also provides pharmaceutical compns. comprising compds. of formula I and provides methods of treating cancer comprising administering a compound of formula I. Thus, II was prepared via an intramol. methathesis macrocyclization synthetic sequence and showed good cell growth inhibition against various drug-resistant tumors.

ΙT 152044-54-7P 190370-13-9P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

> (synthesis of epothilone derivs. for use in pharmaceutical compns. as antitumor agents)

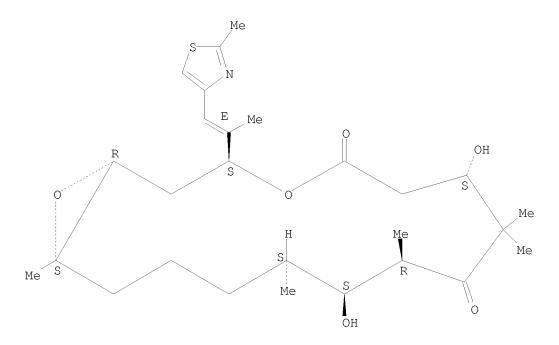
RN 152044-54-7 HCAPLUS

CN 4,17-Dioxabicyclo[14.1.0]heptadecane-5,9-dione, 7,11-dihydroxy-8,8,10,12,16-pentamethyl-3-[(1E)-1-methyl-2-(2-methyl-4-1)]thiazolyl)ethenyl]-, (1S,3S,7S,10R,11S,12S,16R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-). Double bond geometry as shown.

RN 190370-13-9 HCAPLUS CN 4,17-Dioxabicyclo[14.1.0]heptadecane-5,9-dione, 7,11-dihydroxy-8,8,10,12,16-pentamethyl-3-[(1E)-1-methyl-2-(2-methyl-4-thiazolyl)ethenyl]-, (1R,3S,7S,10R,11S,12S,16S)- (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 5 OF 151 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2005:497473 HCAPLUS

DOCUMENT NUMBER: 143:65317

TITLE: Aptamers binding to PDGF, VEGF, or other targets and

their use as oncology therapeutics

INVENTOR(S): Diener, John L.; Epstein, David; Ferguson, Alicia;

Grate, Dilara; Keefe, Anthony Dominic; McCauley, Thomas Greene; Preiss, Jeffrey R.; Stanton, Martin;

Wilson, Charles

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 101 pp., Cont.-in-part of U.S.

Ser. No. 829,504.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 12

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Materials and methods are provided for producing and using aptamers useful AΒ as oncol. therapeutics capable of binding to PDGF, PDGF isoforms, PDGF receptor, and VEGF or any combination thereof with great affinity and specificity. The compns. of the present invention are particularly useful in solid tumor therapy and can be used alone or in combination with known cytotoxic agents for the treatment of solid tumors. Also disclosed are aptamers having one or more CpG motifs embedded therein or appended thereto. Thus, a composition comprising three PDGF-binding aptamers connected via hexaethylene glycol bridges and conjugated to PEG at the 5'-terminus was prepared This composition exhibited superior pharmacokinetics to one not conjugated to PEG. The composition, when combined with irinotecan, improved the efficacy of the irinotecan in colon cancer xenograft models.

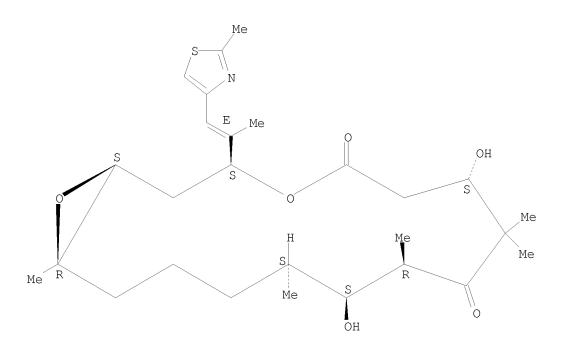
ΙT 152044-54-7, Epothilone B

> RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (aptamers and; aptamers binding to PDGF, VEGF, or other targets and their use as oncol. therapeutics)

152044-54-7 HCAPLUS RN

CN 4,17-Dioxabicyclo[14.1.0]heptadecane-5,9-dione, 7,11-dihydroxy-8,8,10,12,16-pentamethyl-3-[(1E)-1-methyl-2-(2-methyl-4thiazolyl)ethenyl]-, (1S,3S,7S,10R,11S,12S,16R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-). Double bond geometry as shown.



L8 ANSWER 6 OF 151 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:1080882 HCAPLUS

DOCUMENT NUMBER: 142:38062

TITLE: Preparation of protected

5,7-dihydroxy-4,4-dimethyl-3-oxoheptanoic acid ester derivatives and intermediates thereof for synthesizing

epothilones and derivatives

INVENTOR(S): Westermann, Juergen; Platzek, Johannes; Petrov, Orlin

PATENT ASSIGNEE(S): Schering Aktiengesellschaft, Germany

SOURCE: PCT Int. Appl., 33 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: German

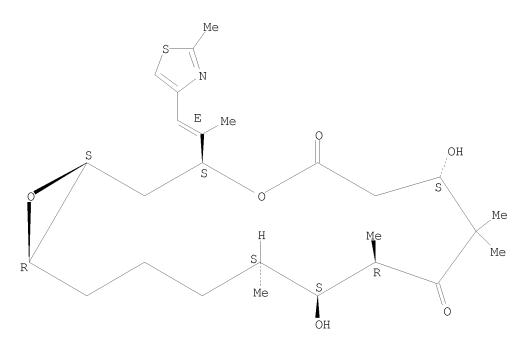
FAMILY ACC. NUM. COUNT: 1

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		SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,
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EP 1631563 20060308 EP 2004-739609 Α1 20040605 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK JP 2006527180 Τ 20061130 JP 2006-508280 20040605 US 20080015366 A1 20080117 US 2007-559389 20070316 <--PRIORITY APPLN. INFO.: DE 2003-10326195 A 20030607 WO 2004-EP6057 W 20040605 OTHER SOURCE(S): MARPAT 142:38062 GΙ

AB The present invention discloses methods for preparation of novel protected 5,7-dihydroxy-4,4-dimethyl-3-oxoheptanoic acid ester derivs., such as I [R1, R2 = hydroxyl protecting group; R1R2 = isopropylidne; R3 = alkyl; R4 = allyl, alkenyl, alkynyl, alkoxyalkyl, alkoxyalkenyl, alkoxyalkynyl, arylalkyl, etc.], and intermediates thereof for the synthesis of epothilones and epothilone derivs. Thus, 3-[(4S)-2,2-dimethyl-1,3-dioxan-4-yl]-3-methyl-butan-2-one, [obtained bythe reaction of 3(S)-(3,5)-acetonedimethylketal-2,2-dimethyl-pentannitrile and methyllithium-lithiumbromide-complex], was treated with diallylcarbonate to afford (4S)-2,2-dimethyl-[1,3]-dioxan-4-yl-4-methyl-3oxo-pentanoic acid allyl ester (II). II was reacted with terakistriphenylphosphinepalladium to provide (4S)-4-(2-methyl-3-oxo-hept-6-ene-2-yl)-2,2-dimethyl-[1,3]-dioxane, which was hydrogenated in presence of palladium-carbon to afford (4S)-4-(2-methyl-3-oxo-heptane-2-yl)-2, 2-dimethyl-[1,3]-dioxane (III).ΙT 152044-53-6DP, Epothilone A, derivs. RL: PNU (Preparation, unclassified); PREP (Preparation) (preparation of protected 5,7-dihydroxy-4,4-dimethyl-3-oxoheptanoic acid esters and intermediates thereof for synthesizing epothilones and derivs.) RN 152044-53-6 HCAPLUS 4,17-Dioxabicyclo[14.1.0]heptadecane-5,9-dione, CN 7,11-dihydroxy-8,8,10,12-tetramethyl-3-[(1E)-1-methyl-2-(2-methyl-4thiazolyl)ethenyl]-, (1S,3S,7S,10R,11S,12S,16R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-). Double bond geometry as shown.



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 7 OF 151 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:1080626 HCAPLUS

DOCUMENT NUMBER: 142:49205

TITLE: Stabilized aptamers to growth factors and their

receptors for use in the treatment of solid tumors

INVENTOR(S): Epstein, David; Grate, Dilara; Stanton, Martin;

Diener, John L.; Wilson, Charles; McCauley, Thomas;

DeSouza, Errol

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 96 pp., Cont.-in-part of U.S.

Ser. No. 762,915.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

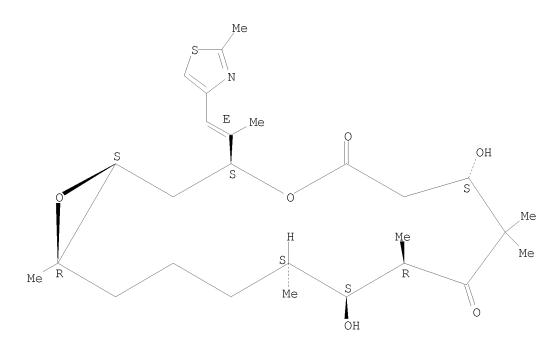
FAMILY ACC. NUM. COUNT: 12

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- AΒ Aptamers that bind specifically to platelet-derived growth factor, vascular endothelial growth factor, their receptors and isoforms of the growth factors are described for use in the treatment of solid tumors dependent on these growth factors. They can be used alone or in combination with known cytotoxic agents for the treatment of solid tumors. The aptamers are modified, e.g. by using modified backbones or conjugation with polyethylene glycol, to improve in vivo stability. Aptamers with one or more immunostimulant CpG motifs are also described. Bivalent aptamers binding one of these targets and another growth- or apoptosis-regulating are also described.
- ΙΤ 152044-54-7, Epothilone B
 - RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (cancer therapy with aptamers and; stabilized aptamers to growth factors and their receptors for use in treatment of solid tumors)
- RN 152044-54-7 HCAPLUS
- CN 4,17-Dioxabicyclo[14.1.0]heptadecane-5,9-dione, 7,11-dihydroxy-8,8,10,12,16-pentamethyl-3-[(1E)-1-methyl-2-(2-methyl-4-1)]thiazolyl)ethenyl]-, (1S,3S,7S,10R,11S,12S,16R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-). Double bond geometry as shown.



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L8 ANSWER 8 OF 151 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:1060832 HCAPLUS

DOCUMENT NUMBER: 142:43740

TITLE: Aptamer-toxin molecules and methods for using same

INVENTOR(S): Stanton, Martin; Kurz, Markus; Wilson, Charles

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 41 pp., Cont.-in-part of U.S.

Ser. No. 600,007.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 12

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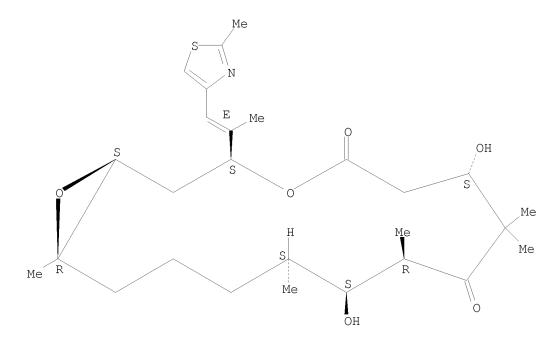
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AB Materials and methods are provided to prepare therapeutic conjugates for the treatment of proliferative diseases. The therapeutic conjugates of the invention comprise a targeting moiety conjugated to a therapeutic moiety. The therapeutic moiety of the conjugates of the present invention have a cytotoxic effect and are useful in the treatment of proliferative diseases.

RN 152044-54-7 HCAPLUS

CN 4,17-Dioxabicyclo[14.1.0]heptadecane-5,9-dione, 7,11-dihydroxy-8,8,10,12,16-pentamethyl-3-[(1E)-1-methyl-2-(2-methyl-4-thiazolyl)ethenyl]-, (1S,3S,7S,10R,11S,12S,16R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-). Double bond geometry as shown.



L8 ANSWER 9 OF 151 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:1036893 HCAPLUS

DOCUMENT NUMBER: 142:697

TITLE: Combination of histone deacetylase inhibitors with

chemotherapeutic agents

Atadja, Peter Wisdom; Remiszewski, Stacy William; INVENTOR(S):

Trogani, Nancy

PATENT ASSIGNEE(S): Novartis A.-G., Switz.; Novartis Pharma G.m.b.H.

PCT Int. Appl., 43 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

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OTHER SOURCE(S): MARPAT 142:697

The invention relates to a combination which comprises (a) one or more chemotherapeutic agents and (b) a histone deacetylase inhibitor ('HDAI') for simultaneous, concurrent, sep. or sequential use, especially for use in the treatment of proliferative diseases including pre-malignant lesions (e.g. colon polyps) and malignancies, both solid and undifferentiated or other proliferative diseases in a mammal, particularly a human. The invention also relates to pharmaceutical compns. comprising such a combination and to a method of preventing or treating proliferative diseases including pre-malignant lesions (e.g. colon polyps) and malignancies, both solid and undifferentiated or other proliferative diseases, in a mammal, particularly a human, with such a combination. The present invention further also relates to a com. package or product comprising such a combination.

152044-54-7, Epothilone B

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(combination of histone deacetylase inhibitors with chemotherapeutic

agents)

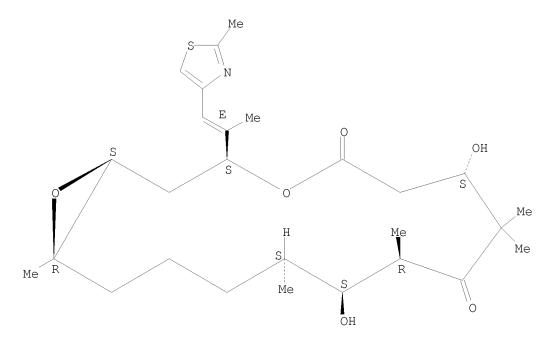
RN 152044-54-7 HCAPLUS

CN 4,17-Dioxabicyclo[14.1.0]heptadecane-5,9-dione,

7,11-dihydroxy-8,8,10,12,16-pentamethyl-3-[(1E)-1-methyl-2-(2-methyl-4-

thiazolyl)ethenyl]-, (1S,3S,7S,10R,11S,12S,16R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-). Double bond geometry as shown.



OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD

(4 CITINGS)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 10 OF 151 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:960045 HCAPLUS

DOCUMENT NUMBER: 141:384396

TITLE: Bone-localizing radiopharmaceutical and

tubulin-interacting compound combinatorial

radiotherapy

INVENTOR(S): Braendle, Edgar; Hausman, Diana

PATENT ASSIGNEE(S): Schering Ag, Germany SOURCE: Eur. Pat. Appl., 25 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

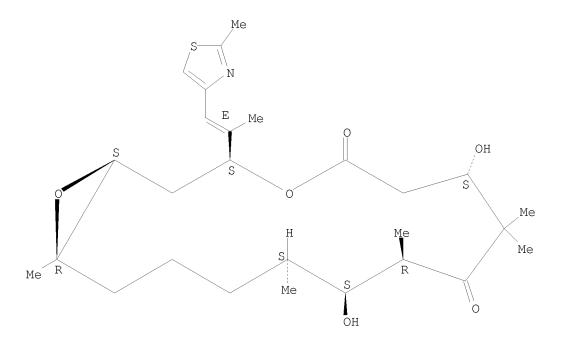
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PRIORITY APPLN. INFO.:
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AΒ
     The present invention relates to a method for the improved treatment of a
     cancerous disease in a patient and/or for the palliation of pain associated
     with cancer diseases, comprising the administration of a tubulin
     interacting compound in combination with a bone-localizing
     radiopharmaceutical to the patient in an effective amount that will not
     cause any substantial ablation of the bone marrow. In particular, the
     cancerous disease is selected from the group of cancer diseases,
     comprising multiple myeloma, leukemia, lymphoma, breast cancer, prostate
     cancer, gynecol. cancer, gastric cancer ovarian cancer, lung cancer and/or
     renal cell carcinoma. In a preferred embodiment, the bone-localizing
     radiopharmaceutical is samarium Sm 153 lexidronam (Quadramet) and the
     tubulin-interacting compound is docetaxel.
ΙT
     152044-53-6, Epothilone A
                                152044-54-7,
     Epothilone B
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (cancer radiotherapy with combination of bone-localizing
        radiopharmaceutical and tubulin-interacting compound)
RN
     152044-53-6 HCAPLUS
CN
     4,17-Dioxabicyclo[14.1.0]heptadecane-5,9-dione,
     7,11-dihydroxy-8,8,10,12-tetramethyl-3-[(1E)-1-methyl-2-(2-methyl-4-1)]
     thiazolyl)ethenyl]-, (1S,3S,7S,10R,11S,12S,16R)- (CA INDEX NAME)
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Absolute stereochemistry. Rotation (-). Double bond geometry as shown.

RN 152044-54-7 HCAPLUS CN 4,17-Dioxabicyclo[14.1.0]heptadecane-5,9-dione, 7,11-dihydroxy-8,8,10,12,16-pentamethyl-3-[(1E)-1-methyl-2-(2-methyl-4-thiazolyl)ethenyl]-, (1S,3S,7S,10R,11S,12S,16R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-). Double bond geometry as shown.



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD

(2 CITINGS)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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ANSWER 40 OF 151 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:931114 HCAPLUS

DOCUMENT NUMBER: 139:395751

TITLE: Preparation of C-21 modified epothilone

derivatives for use in pharmaceutical compositions for

the treatment of cancer

Lee, Francis Y. F.; Haby, Thomas A.; Naringrekar, INVENTOR(S):

Vijay H.; Raghavan, Krishnaswamy S.; Franchini, Miriam

PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA

SOURCE: PCT Int. Appl., 65 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent English LANGUAGE:

FAMILY ACC. NUM. COUNT: 1

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PRIORIT	Y APP	LN.	INFO	.:						US 2	002-	3806.	34P		P 2	0020	515
									,	WO 2	003-	US15	097	,	W 2	0030	513
OTHER S GI	OURCE	(S):			MAR:	PAT	139:	3957	51								

AB C-21 modified epothilones, such as I [R = NH2, OH, SH, alkylamino, alkoxy, alkylthio, etc.], were prepared for therapeutic use as antitumor agents. Thus, 21-aminoepothilone B I (R = NH2) was prepared by reaction of epothilone F I (R = OH) with diphenylphosphoryl azide in THF under argon to give 21-azidoepothilone B I (R = N3) in 91% yield and subsequent hydrogenation of the azide using Lindlar catalyst in EtOH and an H2 atmosphere to give the target amine in 81% yield. The compns. are stable and readily prepared for administration by dissoln. in aqueous vehicles suitable for i.v. administration. A process for formulating C-21 modified epothilone derivs. for oral and parenteral administration was disclosed.

IT 152044-54-7, Epothilone B

RL: RCT (Reactant); RACT (Reactant or reagent) (preparation of C-21 modified epothilone derivs. for use in pharmaceutical compns. for treatment of cancer)

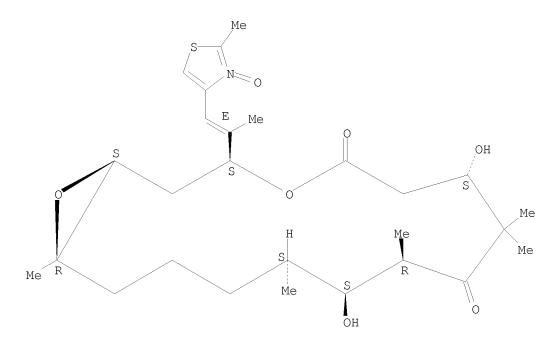
RN 152044-54-7 HCAPLUS

CN 4,17-Dioxabicyclo[14.1.0]heptadecane-5,9-dione, 7,11-dihydroxy-8,8,10,12,16-pentamethyl-3-[(1E)-1-methyl-2-(2-methyl-4-thiazolyl)ethenyl]-, (1S,3S,7S,10R,11S,12S,16R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-). Double bond geometry as shown.

219990-27-9P, Epothilone B N-oxide ΙT RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of C-21 modified epothilone derivs. for use in pharmaceutical compns. for treatment of cancer) RN 219990-27-9 HCAPLUS CN 4,17-Dioxabicyclo[14.1.0]heptadecane-5,9-dione, 7,11-dihydroxy-8,8,10,12,16-pentamethyl-3-[(1E)-1-methyl-2-(2-methyl-3oxido-4-thiazolyl)ethenyl]-, (1S, 3S, 7S, 10R, 11S, 12S, 16R)- (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD

(2 CITINGS)

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 41 OF 151 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:913055 HCAPLUS

DOCUMENT NUMBER: 139:399770

TITLE: Medical goods comprising heparin or chitosan-based

hemocompatible coating

INVENTOR(S): Horres, Roland; Linssen, Marita Katharina; Hoffmann,

Michael; Faust, Volker; Hoffmann, Erika; Di Biase,

Donato

PATENT ASSIGNEE(S): Hemoteq G.m.b.H., Germany

SOURCE: PCT Int. Appl., 93 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 2

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PRIORITY APPLN. INFO.:
                                          DE 2002-10221055
                                                           A 20020510
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                                                            W 20030415
                                          IN 2004-MN606
                                                             A3 20041028
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AΒ The invention relates to oligo- and polysaccharides containing the sugar structural element N-acylglucosamine or N-acylgalactosamine, in addition to the use thereof for producing hemocompatible surfaces and to methods for coating surfaces in a hemocompatible manner with said oligo- and polysaccharides, which constitute the common biosynthetic precursor substances of heparin, heparan sulfates and chitosan. The invention also relates to methods for producing the oligo- and/or polysaccharides, in addition to diverse application options involving hemocompatible surfaces. The invention specifically relates to the use of the oligo- and/or polysaccharides on stents involving at least one hemocompatible coating that has been applied according to the invention and that contains an anti-proliferative, anti-inflammatory and/or athrombogenic active ingredient, to methods for producing said stents and to the use of the latter for preventing restenosis. Thus desulfated and reacetylated heparin was prepared; the Ac-heparin product was used for coating coronary metal stents. The stents were implanted in swines; after four weeks the animals were anesthetized and the artery segments removed for histomorphometric anal.

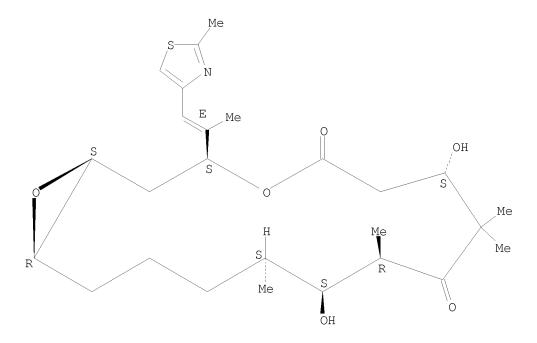
IT 152044-53-6, Epothilone A 152044-54-7, Epothilone B

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (medical goods comprising a heparin-based hemocompatible coating) 152044-53-6 HCAPLUS

RN

CN 4,17-Dioxabicyclo[14.1.0]heptadecane-5,9-dione, 7,11-dihydroxy-8,8,10,12-tetramethyl-3-[(1E)-1-methyl-2-(2-methyl-4thiazolyl)ethenyl]-, (1S, 3S, 7S, 10R, 11S, 12S, 16R)- (CA INDEX NAME)

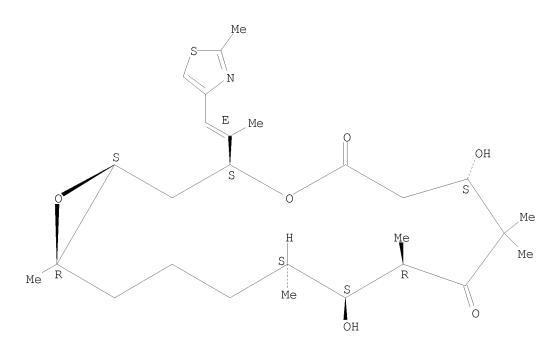
Absolute stereochemistry. Rotation (-). Double bond geometry as shown.



RN152044-54-7 HCAPLUS

4,17-Dioxabicyclo[14.1.0]heptadecane-5,9-dione, CN 7,11-dihydroxy-8,8,10,12,16-pentamethyl-3-[(1E)-1-methyl-2-(2-methyl-4thiazolyl)ethenyl]-, (1S, 3S, 7S, 10R, 11S, 12S, 16R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-). Double bond geometry as shown.



OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD

(6 CITINGS)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 42 OF 151 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:892609 HCAPLUS

DOCUMENT NUMBER: 139:358748

TITLE: Epothilone derivatives for the treatment of

hepatoma and other cancers

INVENTOR(S): Rothermel, John David

PATENT ASSIGNEE(S): Novartis A-G., Switz.; Novartis Pharma G.m.b.H.

SOURCE: PCT Int. Appl., 26 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PAT	CENT	NO.			KIN	D	DATE			APPL	ICAT	ION I	NO.		Dž	ATE	
WO	2003	0926			A1	_	 2003:	1113	,	WO 2	003-	 EP45	 81		20	0030	430 <
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		HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	KΖ,	LC,	LK,	LT,	LU,
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GΙ

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CN 1649585	A	20050803	CN 2003-809770	20030430
JP 2005528414	T	20050922	JP 2004-500867	20030430
NZ 536178	A	20071026	NZ 2003-536178	20030430
RU 2358730	C2	20090620	RU 2004-135307	20030430
ZA 2004008492	A	20060927	ZA 2004-8492	20041020
IN 2004CN02466	A	20070831	IN 2004-CN2466	20041029
MX 2004010853	A	20050214	MX 2004-10853	20041101
NO 2004005249	A	20050126	NO 2004-5249	20041130
US 20050282873	A1	20051222	US 2005-512504	20050711 <
IN 2007CN05291	A	20080627	IN 2007-CN5291	20071121
US 20080161369	A1	20080703	US 2008-46017	20080311 <
PRIORITY APPLN. INFO.:			US 2002-377063P	P 20020501
			WO 2003-EP4581	W 20030430
			IN 2004-CN2466	A3 20041029
			US 2005-512504	A3 20050711
OTHER SOURCE(S):	MARPAT	139:3587	48	

HO Me Me Me N Me Me N Me

AB The invention provides a method for treating a warm-blooded animal, especially a

Ι

human, having a cancer selected from hepatoma; primary Fallopian tube cancer; primary peritoneal cancer; breast cancer progressing after treatment with hormonal agents or radiotherapy; renal cell carcinoma progressing after treatment with a cytokine, radiotherapy, and/or nephrectomy; melanoma progressing after radiotherapy; prostate cancer progressing after orchiectomy, ovarian cancer progressing after treatment with a platinum compound or radiotherapy; and colorectal cancer progressing after radiotherapy and/or treatment with oxaliplatin or irinotecan; and metastasis thereof, comprising administering to the animal a therapeutically effective amount of an epothilone derivative I [A = O, NRN (RN = H, lower alkyl); R = H, lower alkyl; Z = O, bond], or a pharmaceutically acceptable salt thereof.

IT 152044-54-7

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(epothilone derivs. for treatment of hepatoma and other

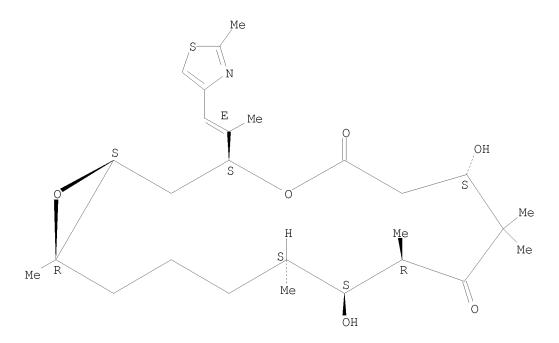
cancers)

RN 152044-54-7 HCAPLUS

CN 4,17-Dioxabicyclo[14.1.0]heptadecane-5,9-dione,

7,11-dihydroxy-8,8,10,12,16-pentamethyl-3-[(1E)-1-methyl-2-(2-methyl-4-thiazolyl)ethenyl]-, (1S,3S,7S,10R,11S,12S,16R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-). Double bond geometry as shown.



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD

(2 CITINGS)

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 43 OF 151 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:757689 HCAPLUS

DOCUMENT NUMBER: 139:276755

TITLE: Preparation of epothilone derivatives for

therapeutic use as anticancer agents Regueiro-Ren, Alicia; Kim, Soong-Hoon

PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA

SOURCE: PCT Int. Appl., 47 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

INVENTOR(S):

PATENT NO. KIND DATE APPLICATION NO. DATE

WO 2003078411 A1 20030925 WO 2003-US7584 20030311 <-
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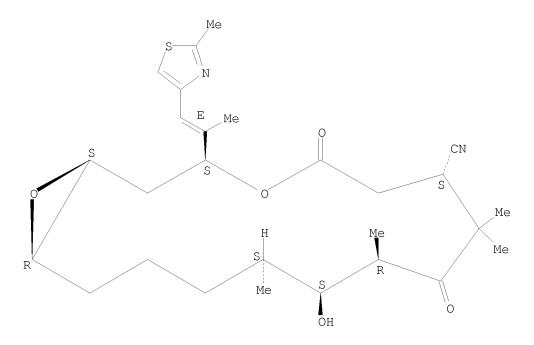
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                                            US 2002-363441P
                                                              P 20020312
PRIORITY APPLN. INFO.:
                                            WO 2003-US7584
                                                                W 20030311
OTHER SOURCE(S):
                         MARPAT 139:276755
GT
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AΒ Epothilone derivs., such as I [M = bond, O, NR9, CR10R11; X = O,NH; R1-R4 = H, alkyl; R5 = H, alkyl, cyano; R6 = H, alkyl, aryl, heterocyclyl; R9-R11 = H, OH, alkyl, alkoxy, aryl, cycloalkyl, heterocyclyl], pharmaceutically acceptable salts, solvates or hydrate thereof, were prepared for use as antitumor agents. Thus, epothilone derivative II was prepared from 2,3-dehydro epothilone A, via silylation of hydroxyl group, potassium cyanide addition, followed by deprotection. The prepared epothilone derivs. were assayed in vitro for their effect on tubulin polymerization and for cytotoxicity against HCT-116 human colon carcinoma cells. Therapeutic compns. containing I or in combination with other therapeutic agents useful in the treatment of cancer or other proliferative diseases are also claimed. 476623-90-2P ΙT 476623-89-9P 476623-91-3P 476623-92-4P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (preparation of epothilone derivs. for therapeutic use as anticancer agents) RN 476623-89-9 HCAPLUS 4,17-Dioxabicyclo[14.1.0]heptadecane-7-carbonitrile, CN 11-hydroxy-8,8,10,12-tetramethyl-3-[(1E)-1-methyl-2-(2-methyl-4-11-hydroxy-8,8,10,12-tetramethyl-3-[(1E)-1-methyl-2-(2-methyl-4-11-hydroxy-8,8,10,12-tetramethyl-3-[(1E)-1-methyl-2-(2-methyl-4-11-hydroxy-8,8,10,12-tetramethyl-3-[(1E)-1-methyl-2-(2-methyl-4-11-methyl-3-[(1E)-1thiazolyl)ethenyl]-5,9-dioxo-, (1S,3S,7S,10R,11S,12S,16R)- (CA INDEX

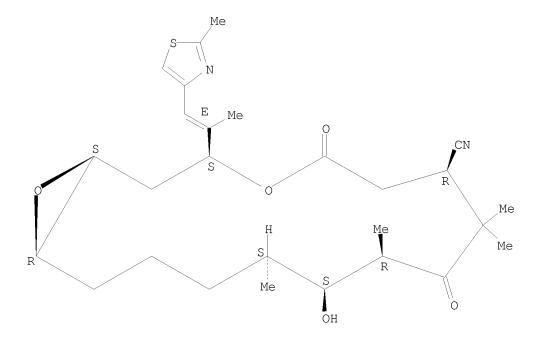
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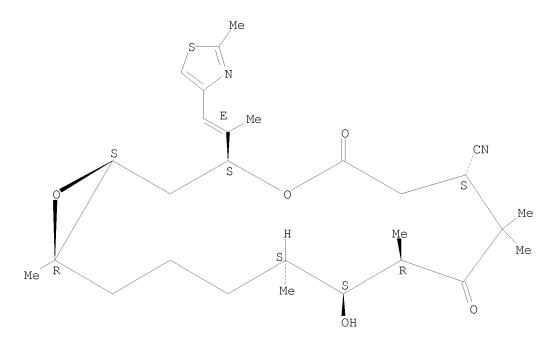
Absolute stereochemistry. Double bond geometry as shown.



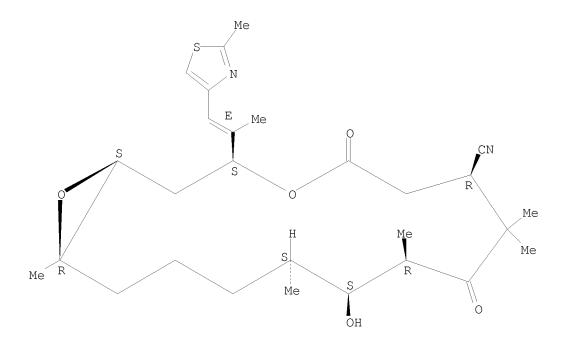
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476623-91-3 HCAPLUS 4,17-Dioxabicyclo[14.1.0]heptadecane-7-carbonitrile, CN 11-hydroxy-8,8,10,12,16-pentamethyl-3-[(1E)-1-methyl-2-(2-methyl-4-thiazolyl)ethenyl]-5,9-dioxo-, (1S,3S,7S,10R,11S,12S,16R)- (CA INDEX NAME)



476623-92-4 HCAPLUS RN CN 4,17-Dioxabicyclo[14.1.0]heptadecane-7-carbonitrile, 11-hydroxy-8,8,10,12,16-pentamethyl-3-[(1E)-1-methyl-2-(2-methyl-4-thiazolyl)ethenyl]-5,9-dioxo-, (1S,3S,7R,10R,11S,12S,16R)- (CA INDEX NAME)



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD

(2 CITINGS)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 44 OF 151 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:757513 HCAPLUS

DOCUMENT NUMBER: 139:276754

TITLE: Preparation of C12-cyano epothilone derivatives with antitumor activity

INVENTOR(S): Vite, Gregory D.; Regueiro-Ren, Alicia

PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA

SOURCE: PCT Int. Appl., 47 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT NO.					KIND DATE				APPL	ICAT	ION I		DATE					
WO	2003		A1 20030925				 WO 2		 US75		20030311 <							
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OTHER SOURCE(S): MARPAT 139:276754

$$R^{5}$$
 R^{6}
 R^{1}
 R^{4}
 R^{2}
 R^{3}
 R^{3}
 R^{3}

AB Epothilone derivs. of formula I [R1-R5 = H, alkyl; R6 = H, alkyl, aryl, cycloalkyl, heterocyclo; X = H; Y = OH; XY = bond] are prepared Also included are therapeutic compns. containing the compds. of formula I as active ingredients, alone or in combination with other therapeutic agents useful in the treatment of cancer or other proliferative diseases. Thus, II was prepared in several steps from epothilone A. The EC0.01 of the prepared compds. was 0.01 to 1000 $\mu \rm M$ in in vitro tubulin polymerization assav.

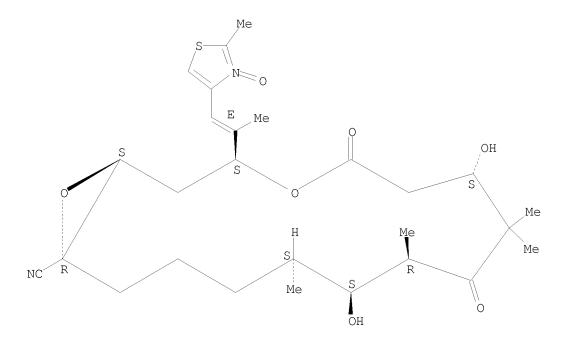
IT 604772-08-9P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of C12-cyano epothilone derivs. with antitumor activity)

RN 604772-08-9 HCAPLUS

CN 4,17-Dioxabicyclo[14.1.0]heptadecane-16-carbonitrile, 7,11-dihydroxy-8,8,10,12-tetramethyl-3-[(1E)-1-methyl-2-(2-methyl-3-oxido-4-thiazolyl)ethenyl]-5,9-dioxo-, (1S,3S,7S,10R,11S,12S,16R)- (CA INDEX NAME)



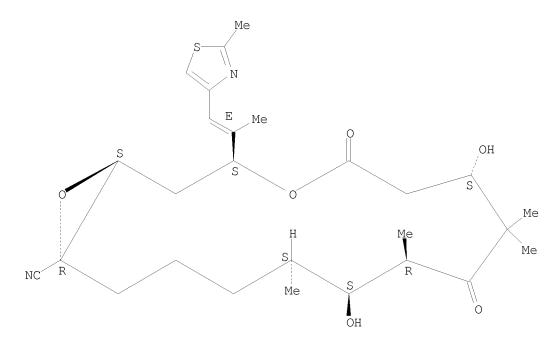
ΙT 476623-94-6P

> RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of C12-cyano epothilone derivs. with antitumor activity)

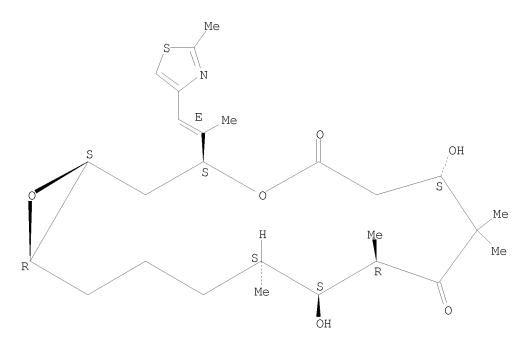
RN 476623-94-6 HCAPLUS

CN 4,17-Dioxabicyclo[14.1.0]heptadecane-16-carbonitrile, 7,11-dihydroxy-8,8,10,12-tetramethyl-3-[(1E)-1-methyl-2-(2-methyl-4thiazolyl)ethenyl]-5,9-dioxo-, (1S,3S,7S,10R,11S,12S,16R)- (CA INDEX NAME)



152044-53-6, Epothilone A ΙT RL: RCT (Reactant); RACT (Reactant or reagent) (preparation of C12-cyano epothilone derivs. with antitumor activity) 152044-53-6 HCAPLUS RN CN 4,17-Dioxabicyclo[14.1.0]heptadecane-5,9-dione, 7,11-dihydroxy-8,8,10,12-tetramethyl-3-[(1E)-1-methyl-2-(2-methyl-4thiazolyl)ethenyl]-, (1S,3S,7S,10R,11S,12S,16R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-). Double bond geometry as shown.



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD

(1 CITINGS)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 45 OF 151 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:757486 HCAPLUS

DOCUMENT NUMBER: 139:277113

TITLE: Synthesis of atorvastatin and epothilone

synthons via 2-deoxyribose-5-phosphate

aldolase-catalyzed asymmetric aldol condensation of

aldehydes

INVENTOR(S): Wong, Chi-huey; Liu, Junjie; De Santis, Grace; Burk,

Mark

PATENT ASSIGNEE(S): The Scripps Research Institute, USA; Diversa

Corporation

SOURCE: PCT Int. Appl., 63 pp.

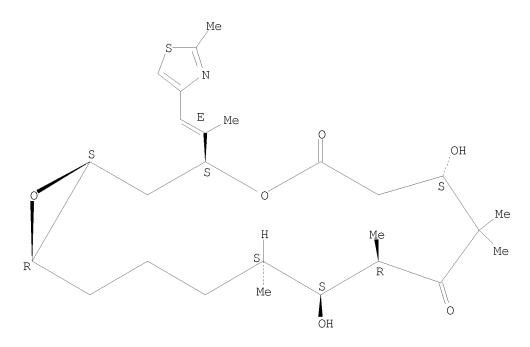
CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

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WO 2003077868	A2	20030925	WO 2003-US7982	20030314 <
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GM, HR,	HU, ID, IL	, IN, IS, J	P, KE, KG, KP, KR,	KZ, LC, LK, LR,
LS, LT,	LU, LV, MA	A, MD, MG, M	K, MN, MW, MX, MZ,	NO, NZ, OM, PH,
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                                                               B3 20030314
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OTHER SOURCE(S):
                        CASREACT 139:277113; MARPAT 139:277113
     The present invention is based on the discovery that
     2-deoxyribose-5-phosphate aldolase (DERA, EC 4.1.2.4) and variants thereof
     can be used to catalyze sequential asym. aldol reactions between a wide
     variety of donor and acceptor aldehydes. The reaction products typically
     contain at least two new stereogenic centers and can be produced in
     enantiomerically pure form. As such, DERA catalyzed asym. aldol chemical can
     be exploited to produce synthons for the synthesis of a variety of
     bioactive mols., e.g. epothilone A.
ΙΤ
     152044-53-6P
     RL: BPN (Biosynthetic preparation); SPN (Synthetic preparation); BIOL
     (Biological study); PREP (Preparation)
        (synthesis of atorvastatin and epothilone synthons via
        2-deoxyribose-5-phosphate aldolase-catalyzed asym. aldol condensation
        of aldehydes)
     152044-53-6 HCAPLUS
RN
     4,17-Dioxabicyclo[14.1.0]heptadecane-5,9-dione,
CN
     7,11-dihydroxy-8,8,10,12-tetramethyl-3-[(1E)-1-methyl-2-(2-methyl-4-
     thiazolyl)ethenyl]-, (1S,3S,7S,10R,11S,12S,16R)- (CA INDEX NAME)
Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.
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OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD

(2 CITINGS)

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 46 OF 151 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:737763 HCAPLUS

DOCUMENT NUMBER: 139:261091

TITLE: Preparation of laulimalide and epothilone

derivatives as microtubule stabilizing compounds

INVENTOR(S): Ghosh, Arun K.

PATENT ASSIGNEE(S): The Board of Trustees of the University of Illinois,

USA

SOURCE: PCT Int. Appl., 118 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

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                                            US 2002-362499P P 20020307
WO 2003-US6457 W 20030304
PRIORITY APPLN. INFO.:
OTHER SOURCE(S):
                       MARPAT 139:261091
GΙ
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* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

```
Laulimalide and epothilone derivs., e.g., I [R1 = H, ORa,
C1-3-alkyl; R2 = C3-7-heterocyclolalkyl, C3-7-heterocyclolalkenyl,
C3-7-cyclolalkyl, C3-7-cyclolalkenyl, C3-7-alkylene-ORa, ORa,
C3-7-cyclolalkylene-N(Ra)2, N(Ra)2, aryl, heteroaryl; R3 = heteroaryl,
aryl, C3-7-heterocyclolalkyl, C3-7-heterocyclolalkenyl; R4 = C1-4-alkyl,
ORa, C3-7-cycloalkyl, C3-7-heterocyclolalkyl, aryl, heteroaryl; X, Y =
CH2, O, NRa, S; Ra = H, C1-4-alkyl, C2-4-alkenyl, C2-4-alkynyl,
heteroaryl, aryl; Z = (CH2)n; n = 0, 1], II, III, IV, V, VI and a
pharmaceutically acceptable salt, solvate or prodrug thereof, useful as
microtubule stabilizing agents, and in the treatment of cancers are
disclosed. Methods of making the compds. and using the compds. as
therapeutic agents in treating cancers also are disclosed. Thus,
trans-desoxylaulimalide I [R1 = \beta-OH, R2 = R', R4 = Me, X = Y = O, Z
= CH2] was prepared from (E)-R'CH:CHCH2CH[OH-(S)](CH2)2SO2Ph and
{6-[(R)-Me3CSiMe2O(CH2)2]-3,6-dihydropyran-2R-y1}CH2CH[Me-
(S)]CH2C(:CH2)CH2CH[OCH2OMe-(S)]CHOin 12 steps. Trans-desoxylaulimalide
was tested for cytotoxicity [IC50 = 360 \text{ nM vs. human MCF}-7 \text{ breast cancer}]
cells].
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IT 152044-53-6DP, Epothilone A, analogs. 152044-54-7DP, Epothilone B, analogs.

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of laulimalide and epothilone derivs. as microtubule stabilizing compds. with antitumor activity)

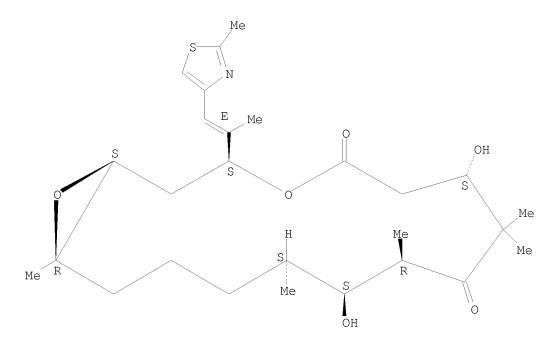
RN 152044-53-6 HCAPLUS

CN 4,17-Dioxabicyclo[14.1.0]heptadecane-5,9-dione, 7,11-dihydroxy-8,8,10,12-tetramethyl-3-[(1E)-1-methyl-2-(2-methyl-4-thiazolyl)ethenyl]-, (1S,3S,7S,10R,11S,12S,16R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-). Double bond geometry as shown.

RN 152044-54-7 HCAPLUS CN 4,17-Dioxabicyclo[14.1.0]heptadecane-5,9-dione, 7,11-dihydroxy-8,8,10,12,16-pentamethyl-3-[(1E)-1-methyl-2-(2-methyl-4-thiazolyl)ethenyl]-, (1S,3S,7S,10R,11S,12S,16R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-). Double bond geometry as shown.



10591921

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD

(3 CITINGS)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 47 OF 151 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:719479 HCAPLUS

DOCUMENT NUMBER: 139:245815

TITLE: Preparation of derivatives of epothilones B

and D for therapeutic use as antitumor agents

INVENTOR(S): Taylor, Richard E.; Chen, Yue PATENT ASSIGNEE(S): University of Notre Dame, USA

SOURCE: PCT Int. Appl., 28 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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PRIORI	TY APP	LN.	INFO	. :						US 2	002-	3608	53P	-	P 2	0020	301	
										WO 2	003-	US61	13	1	W 2	0030	228	
GI																		

AB (14R)- and (14S)-14-methylepothilone B I (X = 0, R = α -Me, β -Me, resp.), (14S)-, and (14R)-14-methylepothilone D I (X = Z-bond, R = α -Me, β -Me, resp.) were synthesized for use in pharmaceutical compns. for treatment of cancer. The prepared

Ι

epothilones were assayed for cytotoxicity against cancer cell lines, such as human breast carcinoma MCF-7, multi-drug resistant breast carcinoma NCI/ADR, non-small cell lung carcinoma NCI-H460 and glioma SF-268.

ΙT 491611-01-9P, (14R)-14-Methylepothilone B 491611-02-0P , (14S)-C14-Methylepothilone B

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of derivs. of epothilones B and D for therapeutic use as anticancer agents)

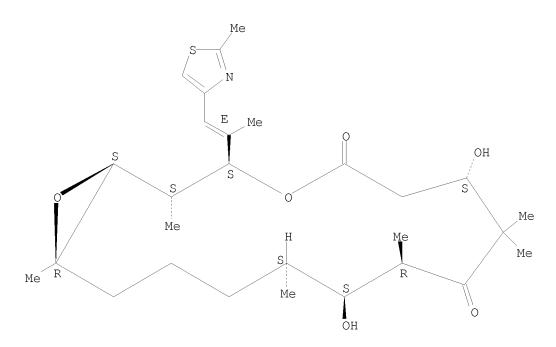
491611-01-9 HCAPLUS RN

4,17-Dioxabicyclo[14.1.0]heptadecane-5,9-dione, CN 7,11-dihydroxy-2,8,8,10,12,16-hexamethyl-3-[(1E)-1-methyl-2-(2-methyl-4thiazolyl)ethenyl]-, (1S, 2R, 3S, 7S, 10R, 11S, 12S, 16R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-). Double bond geometry as shown.

RN 491611-02-0 HCAPLUS

CN 4,17-Dioxabicyclo[14.1.0]heptadecane-5,9-dione, 7,11-dihydroxy-2,8,8,10,12,16-hexamethyl-3-[(1E)-1-methyl-2-(2-methyl-4-1)]thiazolyl)ethenyl]-, (1S,2S,3S,7S,10R,11S,12S,16R)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 48 OF 151 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:697017 HCAPLUS

DOCUMENT NUMBER: 139:229340

TITLE: An oxygen-limited cultivation method for producing

polyketides by myxobacteria with polyketide congener

distribution modulation

INVENTOR(S): Licari, Peter J.; Julien, Bryan; Frykman, Scott;

Tsuruta, Hiroko

PATENT ASSIGNEE(S): Kosan Biosciences, Inc., USA

SOURCE: PCT Int. Appl., 36 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 6

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RW:	GH, KG,	GM, KZ,	KE, MD,	LS, RU,	MW, TJ,	MZ, TM, IE,	SD, AT,	SL, BE,	SZ, BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,

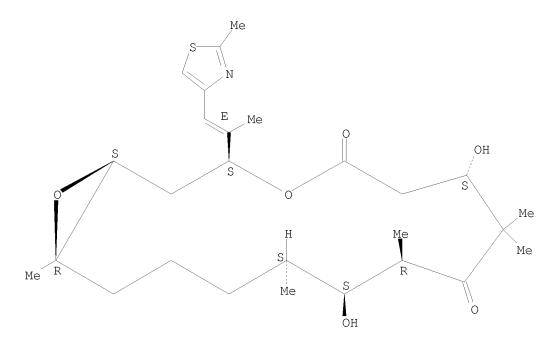
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PRIORITY APPLN. INFO.:
                                        US 2002-359821P
                                                         A2 20001128
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                                        WO 2003-US5487
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- AΒ The present invention provides a generalized oxygen-limited cultivation method for myxobacterial strains engineered to heterologously express polyketide synthase (PKS) gene clusters under various oxygen tension conditions, modulating the polyketide congener distribution.
- 152044-53-6P, Epothilone A 152044-54-7P, Epothilone B
 - RL: BMF (Bioindustrial manufacture); BPN (Biosynthetic preparation); BIOL (Biological study); PREP (Preparation)
 - (oxygen-limited cultivation method for producing polyketides by recombinant myxobacteria with polyketide congener distribution modulation)
- 152044-53-6 HCAPLUS RN
- CN 4,17-Dioxabicyclo[14.1.0]heptadecane-5,9-dione,
 - 7,11-dihydroxy-8,8,10,12-tetramethyl-3-[(1E)-1-methyl-2-(2-methyl-4thiazolyl)ethenyl]-, (1S, 3S, 7S, 10R, 11S, 12S, 16R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-). Double bond geometry as shown.

RN 152044-54-7 HCAPLUS CN 4,17-Dioxabicyclo[14.1.0]heptadecane-5,9-dione, 7,11-dihydroxy-8,8,10,12,16-pentamethyl-3-[(1E)-1-methyl-2-(2-methyl-4-thiazolyl)ethenyl]-, (1S,3S,7S,10R,11S,12S,16R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-). Double bond geometry as shown.



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

ANSWER 49 OF 151 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:693140 HCAPLUS

DOCUMENT NUMBER: 139:191465

TITLE: Use of epothilones in the treatment of brain diseases associated with proliferative processes

INVENTOR(S): Lichtner, Rosemarie; Rotgeri, Andrea; Buchmann, Bernd;

Hoffmann, Karin; Klar, Ulrich; Schwede, Wolfgang;

Skuballa, Werner

PATENT ASSIGNEE(S): Schering Aktiengesellschaft, Germany

SOURCE: Eur. Pat. Appl., 27 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

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		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MΖ,	NO,	NΖ,	OM,	PH,				
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EP	1480	643			A1		2004	1201		EP 2	003-	7433		20030228 < 20030228 <							
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												US 2002-361062P WO 2003-EP2085						W 20030228			
							400					0			_						

OTHER SOURCE(S): MARPAT 139:191465

The invention provides the use of an epothilone, which shows an average distribution coefficient between plasma and brain of 0.3-1.5 in the mouse

i.v. bolus injection assay, for the preparation of a medicament for the treatment of a brain disease associated with proliferative processes.

585569-58-0 585569-62-6 TΤ

> RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(epothilones for treatment of brain diseases associated with proliferative processes)

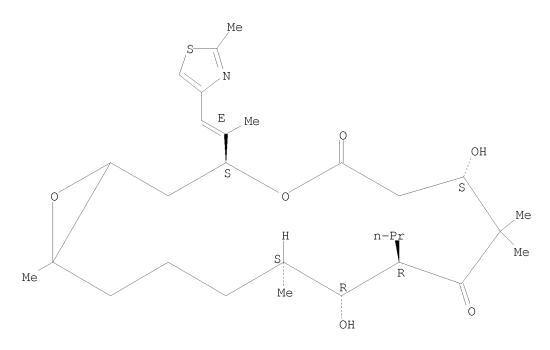
585569-58-0 HCAPLUS RN

4,17-Dioxabicyclo[14.1.0]heptadecane-5,9-dione, CN 10-ethyl-7, 11-dihydroxy-8, 8, 12, 16-tetramethyl-3-[(1E)-1-methyl-2-(2-methyl-3)]4-thiazolyl)ethenyl]-, (3S,7S,10R,11R,12S)- (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

RN 585569-62-6 HCAPLUS

CN 4,17-Dioxabicyclo[14.1.0]heptadecane-5,9-dione, 7,11-dihydroxy-8,8,12,16-tetramethyl-3-[(1E)-1-methyl-2-(2-methyl-4thiazolyl)ethenyl]-10-propyl-, (3S,7S,10R,11R,12S)- (CA INDEX NAME)



REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 50 OF 151 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:678602 HCAPLUS

DOCUMENT NUMBER: 139:197297

TITLE: Process for the preparation of 21-amino

epothilone derivatives

INVENTOR(S): Favreau, Denis; Kant, Joydeep; Levesque, Kathia; Wang,

Shaopeng; Guo, Zhengrong; James, Brian L.

PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA

SOURCE: PCT Int. Appl., 35 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT	NO.			KIND DATE				APPLICATION NO.						DATE			
WO 2003 WO 2003	A2 A3	A2 20030828 A3 20040708			WO 2	003-	 US44		20030213 <								
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	FI,	FR,	GB,	GR,	HU,	ΙE,	ΙΤ,	LU,	MC,	NL,	PT,	SE,	SI,	SK,	TR,	BF,	
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20030213 <--AU 2003211047 Α1 20030909 AU 2003-211047 US 20030187039 20031002 US 2003-365892 20030213 <--Δ1 US 6930187 R2 20050816 PRIORITY APPLN. INFO.: US 2002-357554P P 20020215 WO 2003-US4426 W 20030213 OTHER SOURCE(S): CASREACT 139:197297; MARPAT 139:197297

GI

The present invention provides an improved one-pot conversion process for the synthesis of 21-amino epothilone derivs., such as I [R = H, alkyl; X = bond, O, S, CH2, NR1; Y = O, NH; R1 = H, alkyl, aryl, COR2, CO2R2, CONHR2, CONR2R3, SO2R3, SO2NHR2, SO2NR2R3; R2,R3 = alkyl, aryl, arylalkyl, heteroaryl; R2R3 = N, heterocycle], from 21-hydroxy epothilones. Thus, mCPBA oxidation of epothilone B provided epothilone B N-oxide, which on treatment with trifluoroacetic anhydride, lutidine and subsequently with ammonium hydroxide, afforded epothilone F (II). II was reacted with diphenylphosphoryl azide to yield 21-azido epothilone B (III), which on reaction with trimethylphosphine and ammonium hydroxide yielded 21-amino epothilone B I (R = Me; X, Y = O).

IT 219990-27-9P, Epothilone B N-oxide RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of 21-amino epothilone derivs.)

RN 219990-27-9 HCAPLUS

CN 4,17-Dioxabicyclo[14.1.0]heptadecane-5,9-dione, 7,11-dihydroxy-8,8,10,12,16-pentamethyl-3-[(1E)-1-methyl-2-(2-methyl-3-oxido-4-thiazolyl)ethenyl]-, (1S,3S,7S,10R,11S,12S,16R)- (CA INDEX NAME)

152044-54-7, Epothilone B ΙT RL: RCT (Reactant); RACT (Reactant or reagent) (preparation of 21-amino epothilone derivs.) RN 152044-54-7 HCAPLUS 4,17-Dioxabicyclo[14.1.0]heptadecane-5,9-dione, CN 7,11-dihydroxy-8,8,10,12,16-pentamethyl-3-[(1E)-1-methyl-2-(2-methyl-4thiazolyl)ethenyl]-, (1S, 3S, 7S, 10R, 11S, 12S, 16R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-). Double bond geometry as shown.

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

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=> log yCOST IN U.S. DOLLARS SINCE FILE TOTAL SESSION ENTRY FULL ESTIMATED COST 333.04 146.94 DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL ENTRY SESSION CA SUBSCRIBER PRICE -17.22-17.22

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